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NEWSLETTER

of the

Hawaiian Botanical Society

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Membership Year is December through November - DUES are DUE

MEMBERS--HAWAIIAN BOTANICAL SOCIETY

(Note: At the October meeting, the Editor was requested to print a list of Society members in the Newsletter. In this issue we do not have a Principal Paper.)

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Australia

BOTANY NOTE

Lepturus Pilgerianus versus L. Repens

Lepturus repens, not native to the major islands of the Hawaiian Archipelago, is native to many of the Line Islands to the West.

Because of the aspersion cast upon the specific status of Lepturus pilgerianus *Hansen & Potztal by **Fosberg, who admits unfamiliarity with the plant he would relegate to synonymy under some trivial taxan of L. repens (Forst. f.) R. Br., we wish to repeat a few observations that may have escaped readers of our Newsletter. The type (O. Degener 21,291) of the former was collected by Degener & Hatheway on Canton Island, South Pacific, July 14, 1950. It was "Bestimmt als L. repens (Forst. f.) R. Br., jedoch mit der Bemerkung von Herrn Dr. Degener versehen, dass es sich nicht um L. repens handeln kann.)" The species was again studied in the field on Canton by O. Degener in April-May 1951, and by O. Degener & I. Degener (nee Hansen) in February-March 1958.

L. pilgerianus is an annual, as mentioned in the original description; while L. repens, and all remaining species thus far known, appear to be perennials. Though the original description of L. pilgerianus based on herbarium specimens is sufficient to distinguish it from other species, both Degeners in 1958 enjoyed observing the two native Canton species growing practically side by side. Neither are truly repent. Though both do bear adventitious roots at the basal nodes, the plants would be considered "bunch grasses" in the vernacular. L. pilgerianus can be distinguished at a distance from L. repens by being smaller, more open in growth, and not as dark green. Close inspection in the field shows that L. pilgerianus lacks old, dead culms and leaves so conspicuous in L. repens; is red-violet below; has smaller, more open leaves rather than longer ones enclosed in erect fascicles; and inflorescences longer exserted. It shows less ragged insect depredations and mealy bug infestations apparently because as an annual it is not exposed for as long a time to such injuries as is a perennial. The former flowers a bit earlier than the latter, making hybridization not impossible but very, very rare.

Otto and Isa Degener

*Beitrage zur Anatomie und Systematik der Leptureae. Bot. Jahrb. 76(2):268. 1954.
**Pacific Forms of Lepturus R. Br. (Gramineae). Occas. Pap. B.P. Bish. Mus. 21:294. 1955.

EVENTS

Hawaii Environmental Policy Act

The Society had considerable input to the development of the report, A Plan for Hawaii's Environment, November 6, 1973, prepared by the Temporary Commission for Environmental Planning. This report is available from the Office of Environmental Quality Control. It is expected that the next legislative session will be heavily involved with the recommendations made in the report.

Pacific Science Assoc., Forestry Committee

The report of the Scientific Committee on Forestry, submitted by Dr. D. A. N. Cromer, (Chairman, Australia) to the Second Inter-Congress at Guam, in May 1973, contains the following summary:

Forests comprise an important component of all ten countries contributing to the report. The situation varies, however, from a condition of devastation in southern Korea, through a regime of log exportation in the Philippines, to a highly satisfactory position in British Columbia.

It is significant that in all cases the necessity for the reservation and preservation of representative ecological types and natural areas has been recognised, and in most instances dedication is already advanced.

Few examples of forest tree species in danger of extinction or reaching low levels of germ plasm have been notified.

Nevertheless, the position appears to be much worse in the countries and smaller islands not covered in this report. Attention is drawn to the report of the sub-committee on Floristics and Biogeography which appeared under the title "Urgent Exploration Needs - Pacific Floras" by Professor E. J. H. Corner in the P. S. A. Information Bulletin Vol. 24, Nos. 3 and 4, August 1972.

It is suggested that the deficiencies pointed out in the report, the need for quick action in several localities, and support for botanical and ecological expeditions, etc., could well form the basis of a scientific programme for the Pacific Science Association through the co-operation of several of the existing Scientific Committees, such as Botany, Conservation, Pacific Island Ecosystems, Forestry and others.

Paul Aellen-Meisel

Paul Aellen-Meisel died at the age of 77 on August 20, 1973. Dr. and Mrs. Aellen-Meisel established a botanical trust at Mittlere Strasse 139, Basel, Switzerland, many years ago. Among the specimens housed there are many critical Hawaiian ones obtained by gift and purchase.

O. and I. Degener

Letter from Dr. O. Degener

Mrs. Degener and I thought some of the readers of our Newsletter may be interested in the following:

J. F. Rock Ephemera
Otto & Isa Degener

Vitally interested in the life and especially the Hawaiian activities of our late Austrian friend Dr. Josepf F. *Rock, affectionally called "Pohaku" by his students who should have correctly nicknamed him "Kihoi" instead, we began to collect material for a two-page biography for our Flora Hawaiiensis. In our search we received numerous leads of which we believe the following from a July 8, 1970 letter written by George H. M. Lawrence, former Director of the Hunt Botanical Library, Carnegie-Mellen University, Pittsburgh, Pa., should be on record:

"Dear Otto:

Your note of 19 June, with its parcel of goodies (old botanical correspondence and Fl Haw., drawings), arrived today. For my part, I have just returned from five weeks working in Europe. Our paths have crossed numerous times in the years before and following the war, and again at a pension we shared outside London in the 1950's. After his death I contacted his nephew in Vienna and purchased all of the material that Rock had not specifically bequeathed elsewhere. Unfortunately, there is nothing in the collection prior to 1930 (the period that in many ways was the richest). There are a great many family letters, unidentified photographs, passports from the time he first came to Hawaii until the last, and ephemera. It is a sizeable collection. The letters, for the most part, are in German. Until it has been catalogued it can not be made available to scholars, except as it is consulted here on our premises. I agree with you that he was a wonderful raconteur, and I have often wondered if anyone in Hawaii had the foresight to tape some of his autobiographical accounts."

Aloha,

/s/ Otto Degener

(*Rock is a "maennliches Bekleidungsstueck fuer den Oberkeerper;" and a "weibliches Bekleidungsstueck von der Huefte abwaerts."

"Rock" is a male garment for the upper body and a female garment for the lower body, according to O. Kirsch.

Ed.)

SOCIETY BUSINESS

New Officers

On the back page of this Newsletter are listed the Officers elected at the December meeting.

Minutes of the Regular Meeting, 5 November 1973

The meeting was brought to order by the president, Ted Green at 7:35 PM. The minutes of the previous regular meeting were read and approved. The treasurer's report submitted for November showed balances of $11,699.20 in the Neal Fund, $455.11 in checking, and $120.64 in savings accounts, respectively. There were 41 members and 25 guests in attendance.

Correspondence was read from: 1) Flora Pacifica requesting financial support for next year's show; 2) a request for nominees to serve on the Hawaii Water Resources Regional Commission; 3) from the University of Hawaii announcing a symposium on diversified agriculture; and 4) a news release from the American Association of Nurserymen.

Reporting for the Agriculture Advisory Committee, Ron Hurov presented his findings from a survey he made of the labeling of plants at 19 of the botanic gardens and arboreta throughout the State. He said that the care was variable. Most poor labeling was a result of financial straits. He found that the Honolulu Zoo and the Pacific Tropical Botanical Gardens were the best kept and could serve as models for the others. He was to publish a list of his survey in the Newsletter. Dr. Sagawa pointed out that one would have to examine the function of each of the organizations before one could level criticism.

The Nominations Committee (Manhoff, Montgomery and Gay) presented the following slate of officers for 1974:

President:	Dr. William Theobald
Vice-president:	Dr. Derral Herbst
Secretary:	Mrs. Jean Maka
Treasurer:	Mr. Paul Yamanaka
Board of Director's:	Dr. Charles Lamoureux and Mr. Ted Green

A round of applause was given Mrs. Ercell Woolford, the outgoing treasurer who is retiring to Missouri with her husband.

NEW BUSINESS: Milton Manhoff presented a motion that the Board of Directors of the Society be increased to 7 members and officers serving rotating terms, two 3-year members to be elected each year. He suggested this as a means of maintaining continuity of people in the Executive Board. In answer to a question passed by Dr. Palmer, the President stated that he had found no problems with the present arrangement. Dr. Sagawa added that it would be hard to get that many candidates. A motion by Dr. Palmer that this matter be referred to the Executive Board passed.

OLD BUSINESS: It was announced that 50 endemic trees would be planted on the morning of 17 November on the front lawn near Hale Kuahiwi on the University of Hawaii campus. This had met with the approval of the East-West Center which was also to provide the refreshments. Some of the species to be planted were Hibiscus waimeae, ohai (Sesbania tomentosa), wiliwili (Erythrina sandwicensis), koa (Acacia koa), kauila (Colubrina oppositifolia), and 'aulu (Sapindus oahuensis). The University was to supply the shovels but volunteers were needed for the planting and to supply the compost. The plants were to be supplied by the Lyon Arboretum. Dr. Lamoureux mentioned that a similar plan had been stymied by the University a decade ago.

The Executive Board decided to increase the life membership to $100 for a single membership and to $150 for a couple.

Dr. Theobald introduced the speaker, Dr. Charles Lamoureux, Professor of Botany, University of Hawaii who gave an illustrated presentation on "A Botanical Journey through Indonesia".

A plant exchange then followed.

Hostesses for the evening were Rosa Kirsch and Marion Mapes.

The meeting adjourned at 9:30 PM.

W. C. Gagne
Secretary

Annual Report of the Secretary for 1973

The Society maintained its involvement especially in the areas of conservation and agriculture. In conservation matters we provided input to the Governor's Environmental Council for them to draft an "Environmental Policy Act", drawing upon a wide range of community organizations and individuals. We also supported the establishment of the proposed Wilderness Area designation for the North West Hawaiian Islands Wildlife Refuge and the Ahihi Bay-Cape Kinau State Natural Area Reserve on

East Maui. The City of Honolulu incorporated virtually all of the Society's stipulations regarding the proposed Ala Moana Drainage Canal.

In agricultural matters we provided testimony and constructive criticism on the new Plant Quarantine Act and on the proposed Plant Quarantine Regulations. Our input measurably helped to strengthen many provisions in the former. The State Department of Agriculture solicited our comment in both cases. We testified on legislation concerning long-term leases for small farmers in order to enable them to secure better loan arrangements. This legislation passed. Diversified agriculture also commanded considerable attention. Ron Hurov investigated the labeling of plants of the State's various private and public botanic gardens and arboreta. Opposition, led by Bea Krauss, to the demolition of Gilmore Hall for a new art building was unsuccessful.

There were two summer forays to Kahana Valley and Palehua-Palikea Trails led by Dr. Theobald and John Obata respectively. Also, a special summer field trip was held on 12 August by Dr. Warner to the Plant Science Instructional Arboretum at the Waimanalo Field Station.

The following persons were honored by the Society: Mae Obata as the Senior most likely to reflect credit on Botany; and the 16th Annual Science Fair Winners (Isaac Maedo, Lee Imada, Patricia Uyehara, Ron Machida and Granta Nakayama).

Oscar Kirsch and Bob Warner particularly, continued their informative plant displays at many of the regular meetings. We were saddened by the passing of Walter Holt, a long-time member, in March.

The following programs were presented at the regular meetings:

Jan. 3 - "African Safari" by Paul Weissich, Director, Honolulu Botanic Gardens

Feb. 5 - "Waihoi Valley Project - Maui" by Mr. John Kjargaard, Project Director and Co-investigators; a Student Originated Study from the University of Hawaii

Mar. 5 - "Phenology of Plants in Hawaii" by Dr. John Porter, Assistant Professor, Department of Botany, University of Hawaii

Apr. 2 - "Preservation of Natural Areas in the Pacific" by Dr. F. Raymond Fosberg, Botany Department, Smithsonian Institution, Washington. Dr. Gressitt and Mr. Steve Montgomery also presented brief remarks on the Hawaii Natural Area Reserves and Commission framework.

May 7 - "Gardens of Britain" by Dr. James F. Sutcliffe, Visiting Prof. of Plant Physiology from the University of Sussex, England

June 4 - "Problems and Prospects for the Privately Owned Koa and Exotic Forests" by Mr. Norman K. Carlson, Bishop Estate Land Manager, Kona Branch.

Oct. 1 - "Revegetation Problems of Kahoolawe" by Mr. Russell K. LeBarron, Retired Assistant State Forester, Hawaii

Nov. 5 - "A Botanical Journey through Indonesia" by Dr. Charles H. Lamoureux, Professor of Botany, University of Hawaii

Dec. 3 - "Some Environmental Problems" by Mr. Ted Green, Landscape Architect, Fujiwara - Green Joint Ventures, Honolulu, and retiring president of the Hawaiian Botanical Society.

The membership continued to decline and as of December 1, 1973 stood at 265, which was 8 less than at the same date last year.

W. C. Gagne
Secretary

PUBLICATIONS

Akamine, Ernest K. et al 1972 (July)
Passion fruit culture in Hawaii. University of Hawaii Cooperative Extension Service, Circular 345.

Anonymous 1972 (December)
Hawaii wildlife habitat classification system.

Brewbaker, J.L., D.L. Plucknett, and V. Gonzalez 1972 (Nov.)
Varietal variation and yield trials of Leucaena leucocephala (Koa haole) in Hawaii Agricultural Experiment Station Research Bulletin 166.

Bridges, Kent W. and G. Virginia Carey 1973 (April)
Supplement 1. The climate of the IBP sites on Mauna Loa, Hawaii, Island Ecosystems IRP, U. S. International Biological Program Tech. Rep. No. 22.

Burgan, Robert E. and Robert E. Nelson 1972
Decline of ohia lehua forests in Hawaii. Pacific SW. Forest & Range Exp. Stn., Berkeley, Calif. 4 p. (USDA Forest Serv. Gen. Tech. Rep. PSW-3).

Corn, Carolyn 1972 (Aug.)
Seed dispersal methods in Hawaiian Metrosideros, Island Ecosystems IRP, U.S. International Biological Program Tech. Rep. No. 6.

Corn, Carolyn A. & William M. Hiesey 1973 (Feb.)
Altitudinal ecotypes in Hawaiian Metrosideros, Island Ecosystems IRP, U.S. International Biological Program Tech. Rep. No. 18.

Degen, James L., R. Criley & D. McLain 1973 (May)
Ground covers for Hawaii landscapes. University of Hawaii Cooperative Extension Service Circular 457.

Doty, Maxwell S. 1973 (July)
Farming the red seaweed, Eucheuma, for carrageenans Micronesia 9(1): 59-73.

Higaki, Tadashi 1973 (March)
Chemical weed control in Anthurium. Hawaii Agricultural Experiment Station, Res. Rep. 212.

Hirano, Robert T. & K. M. Nagata 1972 (Dec.)
A checklist of Ficus (Moraceae) in the Harold L. Lyon Arboretum.

Hoe, W. J. 1973 (Spring)
Notes on some Hawaiian species of the Pottiaceae. The Bryologist 76(1): 192-195.

Howarth, Francis G. 1972 (Dec.)
Ecological studies on Hawaiian lava tubes. Island Ecosystems IRP, U.S. International Biological Program Tech. Rep. No. 16.

Jensen, William A. 1972 (May)
The embryo sac and fertilization in angiosperms. Harold L. Lyon Arboretum Lecture Number Three, May 10, 1972.

Lamoureux, Charles H. 1973 (June)
Phenology and growth of Hawaiian plants, Island Ecosystems IRP, U. S. International Biological Program, Tech. Rep. No. 24.

Leeper, John R. & J. W. Beardsley 1973 (April)
The bioecology of Psylla uncatoides in the Hawaii Volcanoes National Park and the Acacia koaia Sanctuary. Island Ecosystems IRP, U. S. International Biological Program Tech. Rep. No. 23.

McCall, Wade W. 1973 (Jan.)
Soil classification in Hawaii. University of Hawaii Cooperative Extension Service, Circular 476.

McCall, Wade W. 1973 (April)
Soil organic matter. University of Hawaii Cooperative Extension Service, Circular 470.

McCall, Wade W. 1973 (April)
Constructed windbreaks. University of Hawaii Cooperative Extension Service Circular 473.

Mueller-Dombois, Dieter & Gunter Spatz 1972 (Oct.)
The influence of feral goats on the lowland vegetation in Hawaii Volcanoes National Park. Island Ecosystems IRP, U. S. International Biological Program Tech. Rep. No. 13.

Mueller-Dombois, Dieter & Gunter Spatz 1972 (Oct.)
The influence of SO_2 fuming on the vegetation surrounding the Kahe power plant on Oahu, Hawaii, Island Ecosystems IRP, U. S. International Biological Program Tech. Rep. No. 14.

Mueller-Dombois, Dieter 1973 (Feb.)
Some aspects of island ecosystems analysis, Island Ecosystems IRP, U. S. International Biological Program Tech. Rep. No. 19.

Mueller-Dombois, Dieter 1973 (June)
Natural area system development for the Pacific region, a concept and symposium, Island Ecosystems, U. S. International Biological Program Tech. Rep. No. 26.

Nakasone, Henry Y. & F. D. Rauch 1973 (March)
Ornamental hibiscus - propagation and culture. Hawaii Agricultural Experimental Station, Res. Bull. 175.

Napopeth, Banpot, T. Nishida, & W. C. Mitchell 1972 (Dec.)
Biology and rearing methods of the New Guinea sugarcane weevil, Rhabdoscelus obscurus. Hawaii Agricultural Experiment Station, Tech. Bull. 85.

Porter, John R. 1973 (Aug.)
The growth and phenology of Metrosideros in Hawaii, Island Ecosystems IRP, U. S. International Biological Program Tech. Rep. No. 27.

Richmond, T. de A. & D. Mueller-Dombois 1972
Coastline ecosystems on Oahu, Hawaii. Vegetatio 25(5-6):367-400.

Smathers, G. A. & D. Mueller-Dombois 1972 (Sep.)
Invasion and recovery of vegetation after a volcanic eruption in Hawaii, Island Ecosystems IRP, U. S. International Biological Program Tech. Rep. No. 10.

Sohmer, S. H. 1971 (May)
The lectotype of the genus Charpentiera (Amaranthaceae). Taxon 20(2/3): 345-348.

Sohmer, S. H. 1972 (Mar.)
Contributions from the Herbarium. II. Distribution of collections of Charpentiera (Amaranthaceae). Publication of the University of Wisconsin, La Crosse, Dept. of Biology.

Sohmer, S. H. 1972 (May)
Contributions from the Herbarium. III. Distribution of the Hawaiian collections of S. H. Sohmer. Dept. of Biol., Univ. of Wisconsin, La Crosse.

Sohmer, S. H. 1972 (July)
Revision of the genus Charpentiera (Amaranthaceae) Brittonia 24(3): 283-312.

Sohmer, S. H. & R. T. Hirano 1972 (Dec.)
Charpentiera (Amaranthaceae) as an ornamental. Hawaiian Botanical Society Newsletter, December 1972, pp. 46-47.

Spatz, Gunter & Dieter Mueller-Dombois 1972 (Nov.)
Succession patterns after pig digging in grassland communities on Mauna Loa, Hawaii, Island Ecosystems IRP, U. S. International Biological Program Tech. Rep. No. 15.

Spatz, Gunter 1973 (Feb.)
Some findings on vegetative and sexual reproduction of koa, Island Ecosystems IRP, U. S. International Biological Program Tech. Rep. No. 17.

St. John, Harold 1971
Endemic plants of Kipahulu Valley, Maui, Hawaiian Islands. Pacific Science 25:37-79.

St. John, Harold 1971
The date of publication of Forsters' Characteres Generum Plantarum and its relation to contemporary works. Naturalists can. 98:561-581.

St. John, Harold 1972 (Oct.)
Canavalia kauensis (Leguminosae), a new species from the island of Hawaii - Hawaiian Plant Studies 39. Pacific Science 26(4): 409-414.

St. John, Harold 1972 (Dec.)
The scientific names in the German edition of Parkinson's plants of use for food, medicine etc., in Otaheite. Biol. J. Linn. Soc. 4: 305-310.

St. John, Harold 1972
The Indian species of Pandanus (Section Rykia) Bot. Mag. Tokyo 85: 241-262.

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THE HAWAIIAN BOTANICAL SOCIETY NEWSLETTER is published in February, April, June, October, and December. It is distributed to all Society members for the purpose of informing them about botanical news and progress in Hawaii and the Pacific. News contributions and articles are welcomed.

THE HAWAIIAN BOTANICAL SOCIETY was founded in 1924 to "advance the science of Botany in all its applications, encourage research in Botany in all its phases," and "promote the welfare of its members and to develop the spirit of good fellowship and cooperation among them." Any person interested in the plant life of the Hawaiian Islands is eligible for membership in this Society.
Dues: Regular - $5.00 per year
Family - $7.50
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